



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,122	11/14/2003	Anton Joseph Kryka	PM060A	1941

7590 03/08/2007
Attn: Lise A. Rode
Unisys Corporation
Unisys Way, MS/E8-114
Blue Bell, PA 19424-0001

EXAMINER

HWANG, JOON H

ART UNIT	PAPER NUMBER
----------	--------------

2166

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/714,122

Applicant(s)

KRYKA ET AL.

Examiner

Joon H. Hwang

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are ~~withdrawn from consideration~~ *Canceled*.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The applicants amended claims 1-7, 9, 13-14, and 17-18 and canceled claim 16 in the amendment filed on 12/8/06.

Claims 1-15 and 17-18 are pending.

Response to Arguments

2. Applicant's arguments filed on 12/8/06 have been fully considered but they are not persuasive.

A. The applicants argue that Lal does not teach or suggest an index file in the form of a self-describing document in accordance with the document-type definition file.

The examiner respectfully traverses. Lal discloses XML tags as being metadata. For example, <author> tags tells that data within the tag, that is <author>...</author>, will be an author's name (lines 30-38 in col. 4 and line 62 in col. 1 thru line 18 in col. 2). Thus, the XML tags are self-describing. Lal discloses a Document Type Definition (DTD) used to specify a schema XML data including XML tags (fig. 5 and lines 19-30 in col. 2). Thus, the DTD is in the form of a self-describing document. Lal discloses two types of indexes (a hash table index and a tree index) generated based on XML documents and a DTD file (fig. 7). Lal discloses the indexes containing XML tags and reflecting the basic structure of the XML document and the DTD associated with the XML document (lines 17-27 in col. 5, fig. 8, and fig. 9). Therefore, Lal teaches an index file in the form of a self-describing document in accordance with the document-type-definition file.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Anderson discloses indexing of captured data (i.e., images and related data) (sections 60-69 on pages 2-3, sections 85-97 on pages 6-7, section 131 on page 9, and sections 238-245 on pages 14-15). Lal also discloses indexing of data (i.e., XML) (lines 17-27 in col. 5, fig. 8, and fig. 9). Anderson discloses the captured data (i.e., check value, payee, date, check number, etc.) are in XML (sections 1089-1092 on page 56 and section 1107 on page 56). Anderson does not explicitly disclose indexing of XML data. However, Lal teaches indexing of XML data, wherein an index file is in the form of a self-describing document in accordance with the document type definition file (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5) in order to effectively search data in XML (lines 31-44 and lines 60-64 in col. 2). Therefore, based

Art Unit: 2166

on Anderson in view of Lal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Lal to the system of Anderson in order to effectively search data in XML.

"Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, **test is what combined teachings of references would have suggested to those of ordinary skill in art.**" In re Keller, Terry, and Davies, 208 USPQ 871 (CCPA 1981).

"Reason, suggestion, or **motivation to combine two or more prior art references** in single invention **may come from references themselves**, from **knowledge of those skilled in art** that certain references or disclosures in references are known to be of interest in particular field, or from **nature of problem to be solved;**" Pro-Mold and Tool Co. v. Great Lakes Plastics Inc. U.S. Court of Appeals Federal Circuit 37 USPQ2d 1626 Decided February 7, 1996 Nos. 95-1171, -1181.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

Art Unit: 2166

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 49 of co-pending Application No. 10/714,121. Although the conflicting claims are not identical, they are not patentably distinct from each other because of following reasons:

Claim 49 of Patent Application No. 10/714,121 contain(s) every element of claims 1 and 5 of the instant application and thus anticipate the claim(s) of the instant application. Claims of the instant application therefore are not patently distinct from the

Art Unit: 2166

earlier patent claims and as such are unpatentable over obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a 35 patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

"Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "**anticipated**" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4. This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); Schneller, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected

Art Unit: 2166

under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (U.S. Publication No. 2004/0015566) in view of Lal (U.S. Patent No. 6,684,204).

With respect to claim 1, Anderson teaches a document processing system having at least one computer running system software that interfaces with transport hardware to provide document control and capture document images and document data in various formats, wherein an image file stores a plurality of captured document images for subsequent retrieval on an individual basis, the system including a computer readable storage medium storing the system software (sections 60-69 on pages 2-3, sections 85-97 on pages 6-7, section 131 on page 9, and sections 238-245 on pages 14-15). Anderson teaches instructions for indexing the image file by creating an index file containing indexing data for the captured document images (sections 60-69 on

Art Unit: 2166

pages 2-3, sections 85-97 on pages 6-7, section 131 on page 9, and sections 238-245 on pages 14-15). Anderson teaches data for the captured document images are in XML (sections 1089-1092 on page 56 and section 1107 on page 56). Anderson does not explicitly disclose the index file being in the form of a self-describing document.

However, Lal teaches the index file being in the form of a self-describing document wherein elements describe the indexing data for the captured document images to allow subsequent retrieval of the captured document images on an individual basis (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5) in order to effectively search data in XML (lines 31-44 and lines 60-64 in col. 2).

Therefore, based on Anderson in view of Lal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Lal to the system of Anderson in order to effectively search data in XML.

With respect to claims 2-4, Lal teaches wherein the index file follows a predetermined set of rules for making the index valid, the predetermined set of rules is set forth in a document type definition, and the index file is in accordance with extensible markup language (XML) (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5). Therefore, the limitations of claims 2-4 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

The limitations of claims 5-8 are rejected in the analysis of claims 1-4 above respectively, and these claims are rejected on that basis.

The limitations of claims 9-12 are rejected in the analysis of claims 1-4 above respectively, and these claims are rejected on that basis.

With respect to claim 13, Anderson teaches capturing image data in an imaging subsystem of the document processor (sections 60-69 on pages 2-3, sections 85-97 on pages 6-7, section 131 on page 9, and sections 238-245 on pages 14-15). Anderson teaches indexing the captured image data by creating an index file containing indexing data for the captured image data to allow subsequent retrieval of the captured image data on an individual basis (sections 60-69 on pages 2-3, sections 85-97 on pages 6-7, sections 130-131 on page 9, and sections 238-245 on pages 14-15). Anderson teaches data for the captured document images data are in XML (sections 1089-1092 on page 56 and section 1107 on page 56). Anderson does not explicitly disclose the index file being created in accordance with a document type definition file. However, Lal teaches indexing of XML data, wherein an index file being created in accordance with a document type definition file (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5) in order to effectively search data in XML (lines 31-44 and lines 60-64 in col. 2). Lal also teaches establishing a document-type definition file that sets forth a set of rule for creating a valid index file in the form of a self-describing document, the document type definition file declaring a plurality of elements for describing indexing data (fig. 5). Therefore, based on Anderson in view of Lal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Lal to the system of Anderson in order to effectively search data in XML.

With respect to claim 14, Lal teaches the plurality of element declarations includes first elements related to selected parameters of the document processing system and second elements related to selected parameters of each document that is processed (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5). The limitations of claim 14 are rejected in the analysis of claim 13 above, and the claim is rejected on that basis.

With respect to claim 15, Anderson teaches storing the image data and associated index file in storage means of the document processor (sections 60-69 on pages 2-3, sections 85-97 on pages 6-7, section 131 on page 9, and sections 238-245 on pages 14-15).

With respect to claims 17-18, Lal teaches the document-type definition file includes a plurality of attributes associated with selected ones of the plurality of elements, the association being set forth in an attribute declaration list and the document-type definition file is created in accordance with extensible markup language (XML) (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5). The limitations of claims 17-18 are rejected in the analysis of claim 14 above, and these claims are rejected on that basis.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2166

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

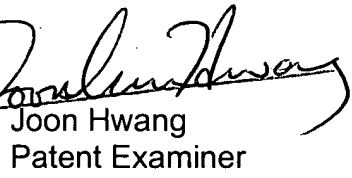
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2166

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joon Hwang
Patent Examiner
Technology Center 2100

3/2/07